

Abstract Of The Disclosure

Disclosed is a method and apparatus of transmit diversity that is backward compatible and does not degrade performance using a transmission architecture that incorporates a form of phase sweep transmit diversity (PSTD) referred to herein as split shift PSTD. Split shift

5 PSTD involves transmitting at least two phase swept versions of a signal over diversity antennas, wherein the two phase swept versions of the signal have a different phase. The phase sweep frequency signals may have a fixed or varying phase shifting rate, may have an identical or different phase shifting rate, may be offset from each other and/or may be phase shifting in the same or opposite direction.